

## DESCRIPTIONS OF NEW EXOTIC FRESH-WATER MOLLUSCA.

BY GEORGE W. TRYON, JR.

### 1. VIVIPARA SUPRAFASCIATA, Tryon.—t. 2, f. 7.

*Description.*—Globose-conic, inflated, rather thin; spire elevated-conic, suture deeply impressed; whorls 5, very convex, the last large, with very fine growth-lines, obsolete revolving lines and slight malleations; umbilicus small, the shell subangular around it; aperture obliquely oval. Rather a brilliant green, with the spire, and body whorl above the aperture, traversed by dark green narrow bands, five or six in number, which are disposed to be alternately narrower.

*Dimensions.*—Length 25 mill., diam. 20 mill.

*Habitat.*—Tropical Australia.

My Cabinet. Cabinet of the Academy of Natural Sciences, Philadelphia.

*Observations.*—This species in the general form reminds one of *V. contecta*, Millet, or of *V. intertexta*, Say. From *V. Australis*, Reeve, it is easily distinguished. That species is narrower, appressed above, with only a few distant brown lines, and the whorls are not so globose. It does not answer at all to the description of *V. Waterhousei*, recently described from Australia.

### 2. HEMISINUS BINNEYI, Tryon.—t. 2, f. 8.

*Description.*—Shell ovate, somewhat thin; spire moderately elevated, apex obtuse, suture well impressed; whorls 5, a little convex, the last large, smooth; aperture more than half the length of the shell, angulate above and below, columella curved, slightly notched at the base. Bright olive, with four darker bands, of which the second is widest, and about fifteen revolving rows of small, numerous, transverse dark red dots; bands red within the aperture.

*Dimensions.*—Length 13 mill., diam. 7 mill.

*Habitat*.—New Grenada, (Wm. G. Binney.)

My Cabinet. Cabinet of the Academy of Natural Sciences, Philadelphia.

*Observations*.—This species is nearly related in form and coloring to *H. aspersus*, Reeve, from Brazil (= *osculati*, Villa), but the latter is spirally grooved, and is a more solid, ventricose shell.

3. *PHYSA* (*ISIDORA*) *HAINESII*, Tryon.—t. 2, f. 9.

*Description*.—Shell ovate, ventricose, moderately thick (for the genus); spire short, acute, suture very deeply impressed; whorls 3 to 4, very rapidly enlarging, extremely convex, the last bulbous, with very fine epidermal revolving lines; aperture broadly oval, well rounded above and below, columella lip almost equally curved with the outer one; a heavy callous deposit on the columella causes a continuous peritreme. Light horn-color.

*Dimensions*.—Length 9.5 mill., diam. 7 mill.

*Habitat*.—Australia, (W. Newcomb, M. D.) India? (W. A. Haines.)

My Cabinet. Cabinet of W. A. Haines, New York. Cabinet of Wesley Newcomb, M. D., Oakland, Cal.

*Observations*.—I cannot identify this species among those recently described from Australia, and its characters are so distinct that it cannot easily be confounded with any other. I am inclined to believe the locality India an error, because among the shells submitted to me by Mr. Haines, were a number of Australian, as well as Indian species.

4. *PHYSA* (*BULINUS*) *ACUTISPIRA*, Tryon.—t. 2, f. 10.

*Description*.—Shell cylindrically-ovate, elongated, very thin, transparent, highly polished; spire elevated, very acute, suture slightly impressed; whorls 5, oblique, slightly convex; aperture narrow-ovate, two-thirds the total length, columella a little folded, and somewhat turned back at the base. Very light horn-color.

*Dimensions*.—Length 12 mill., diam. 6 mill.

*Habitat*.—Australia, (W. A. Haines.)

My Cabinet. Cabinet of W. A. Haines, New York.

*Observations*.—May be compared to *Bulinus hypnorum*, Linn., of Europe, or *Ph. virginea*, Gould, of Oregon.

Among the species recently described in the "Zool. Proc. of London," I find none with which this can be identified.

## 5. PLANORBIS ESPERANZENSIS, Tryon.—t. 2, f. 11, 12, 13.

*Description.*—Shell small; whorls 3, high, obliquely convex very closely revolving; spire somewhat sunken above, shallow below; aperture long and very narrow, oblique. Dark horn-color, shining.

*Dimensions.*—Axis 1.5 mill., diam. 3 mill.

*Habitat.*—Esperanza, Cuba, (C. M. Wheatley.)

My Collection. Collection of Charles M. Wheatley, Phoenixville, Penna.

*Observations.*—This curious little species came along with *Pl. lucidus*, Pfr., with which it has probably hitherto been confounded. The *lucidus* is more wheel-shaped, much lighter in color, and the whorls do not revolve nearly so close one upon the other, consequently are all well exhibited, the spire occupying half the diameter; whereas in *Esperanzensis*, it does not comprise scarcely one-third. In the close revolution of the whorls, this species resembles *Pl. contortus*, Mich., of Europe, and in its form it is strikingly like the Indian *Pl. calathus*, Bens.

## 6. PLANORBIS (PLANORBULA) BERENDTII, Tryon.—t. 2, f. 14, 15, 16.

*Description.*—Shell smooth, consisting of three orbicular volutions, increasing moderately in size; spire a little sunken, suture very distinct, below a little more shallow than above, but otherwise not differing; surface marked by growth-lines; aperture oval, slightly dilated, not extending either above or below, beyond the plane of the volutions, far within dentate, namely on the lip, three narrow, small, equidistant transverse lamellæ, and below them one large perpendicular lamina; on the body opposite, is a central curved transverse lamina, and a smaller one below it. Very light horn-color.

*Dimensions.*—Axis 2 mill., diam. 6 mill.

*Habitat.*—Vera Cruz, Mexico, (Berendt.)  
Orizaba, Mexico, (Botteri.)

My Collection. Collection of Charles M. Wheatley, Phoenixville, Penna.

*Observations.*—A little less in size than *Pl. armigerus*, Say, and externally not unlike it, except in the color being much lighter, and the umbilicus much more shallow. The teeth are arranged very much in the same manner as in *armigerus*.

7. *LYMNEA WILSONII*, Tryon.—t. 2. f. 17.

*Description*.—Shell sinistral, sub-fusiform, thin; spire elongated, acute, suture deeply impressed; whorls 6, convex, oblique, rapidly increasing in size, the last narrowly oval; aperture sub-ovate, half the total length, narrow, columella a little twisted and reflected, leaving a narrow, deep umbilicus. Light amber-color.

*Dimensions*.—Length 22 mill., diam. 10 mill.

*Habitat*.—New Zealand.

My Cabinet. Cabinet of the Academy of Natural Sciences, Philadelphia.

*Observations*.—This is one of the finest of the few sinistral species. It may be compared with *L. Timorensis*, but that is a heavier species, more rugose, with the spire more obtuse, and not so convex.

Dedicated to the memory of the late Dr. Thomas B. Wilson.

*LYMNEA CUBENSIS*, Pfr. I. St. Croix. Dr. R. E. Griffith.  
(Coll. Acad. Nat. Sciences.)

“ “ “ Terroya River, Vera Cruz, Mexico,  
Strebel. (Coll. Wheatley and  
Tryon.)

“ *MACROSTOMA*, Say, Mexico. Berendt. (Coll. Wheat-  
ley.)

*AMNICOLA CINCINNATIENSIS*, Anth. Orizaba, Mexico. Bot-  
teri. (Coll. Wheatley.)